

Careers In the Energy Field



Construction Worker

Construction workers in the energy field are responsible for building local access roads and the foundations that support facilities. They operate heavy equipment and work to put facilities such as wind turbine tower, nacelle, and blade segments together.

Education and Training: Short-term on-the job-training

Environmental Scientist

Environmental scientists work with developers to help them comply with environmental regulations and policies to ensure that physical and wildlife sensitivities as well as cultural impacts are avoided, minimized, or mitigated. These scientists are heavily involved in the study and permitting phases of development along with ongoing monitoring during operation.

Education and Training: Bachelor's degree

Finance Manager

A financial manager develops and maintains financial formulas used by project developers for preliminary project economic analysis. They lead project financing efforts of each project.

Education and Training: Bachelor's degree

Hydroelectric Plant Operator

The plant operator is responsible for the safe, environmentally compliant, and efficient operation of all plant generating equipment while maintaining a constant awareness of dam safety, river flows, and electrical generation.

Education and Training: Apprenticeships

Hydrologist

Hydrologists research the distribution, circulation, and physical properties of underground and surface waters, and study the form and intensity of precipitation, its rate of infiltration into the soil, movement through the earth, and its return to the oceans and atmosphere.

Education and Training: Bachelor's degree

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Hydropower Engineer

Hydropower engineers work with teams of environmental scientists and engineers to review, analyze and resolve issues associated with proposals to construct and operate hydroelectric projects, including major dams, reservoirs, and power plants.

Education and Training: Bachelor's degree

IT Specialist

IT specialists help develop, troubleshoot, and improve computer systems that link energy investment, operations, sales, and customer service teams. They analyze and creatively solve problems with related software and equipment, including remote technologies. They also provide technical assistance to staff and customers.

Education and Training: Associate degree

Land Acquisition Specialist

Land acquisition specialists help developers and project owners obtain land for new generation project development, as well as administer the land after it has been purchased or leased. They coordinate with permitting specialists, lawyers, engineers, and scientists to ensure that projects are built on property which they have rights.

Education and Training: Bachelor's degree or higher

Meteorological Technician

Meteorological technicians are employed to install, maintain, relocate and decommission meteorological towers and equipment used to capture information about the potential wind resource at identified locations.

Education and Training: High-school diploma or equivalent

Sales

Solar sales reps generate customer leads to develop new accounts, prepare proposals, quotes, contracts or presentations for potential customers, select solar energy products for customers based on thermal or electric energy requirements, site conditions or price, assess sites to determine suitability for solar equipment, and calculate potential solar production for a site.

Education and Training: Associate degree

Solar Installer

Residential or small commercial installation professionals may design and prepare the system layout based on specific site characteristics; obtain permits; measure, cut, assemble, and bolt structural framing and solar modules, safely attaching panels to roofs or ground mounts; wire and connect the system to an inverter; inspect installed equipment, structures, or materials to determine code and safety compliance; and, finally, commission the system, ensuring that it meets basic performance estimates.

Education and Training: Associate degree or Journey-level and license.

Solar Services Technician

Solar services technicians address issues detected through remote performance monitoring, residential technicians drive to multiple sites to inspect, evaluate, test, clean, calibrate, and maintain solar module systems, mounting hardware, inverters, and related equipment. The work may entail electrical troubleshooting, diagnostics and repair and network optimization.

Education and Training: Apprentice-level or post-secondary credential.

Wind Turbine Technician

Wind technicians install, inspect, maintain, operate, and repair wind turbines. Wind technicians are capable of diagnosing and fixing any problem that could cause the turbine to be shut down unexpectedly or fail to operate properly.

Education and Training: Two-year technical program